

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-024332**Date Inspected:** 11-Jun-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Li Yang**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG Trial Assembly**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector Mr. S. Manjunath Math was present during the time noted above for observations relative to the work being performed.

This QA Inspector randomly observed the following work in progress:

Orthotropic Box Girder (OBG) at Trial Assembly Areas

Cable Bracket at Bay # 19

This QA Inspector performed Dimension Control Inspection to check and measure the flatness at Cable Brackets Plates connecting Deck Panel, Edge Panel and Side Panel. The following Cable Brackets were inspected and observed flatness within the allowable tolerances.

SA6529

The result of Inspection was informed to the Caltrans Lead Inspector Mr. Hiranch Patel and Mr. Mark Miller for further review and disposition.

Please reference the pictures attached for more comprehensive details.

Cross Beam (CB) # 18

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This QA Inspector performed Dimension Control Inspection for measuring offset between the stiffeners at the following locations.

At Floor Beam (FL3) extension at Segment 13AE to Cross Beam # 18 stiffeners.

At Panel Point (PP) 118, Segment 13AE offset measurement performed between Floor Beam (FL3) stiffeners to west side Vertical Web Plate stiffeners of cross beam # 18 total 13 stiffeners.

At Panel Point (PP) 119 (-1500), Segment 13AE offset measurement performed between Floor Beam (FL3) stiffeners to west side Vertical Web Plate stiffeners of cross beam # 18 total 13 stiffeners.

At Panel Point (PP) 119, Segment 13AE offset measurement performed between Floor Beam (FL3) stiffeners to west side Vertical Web Plate stiffeners of cross beam # 18 total 13 stiffeners.

At Deck Panel extension at Segment 13AE to Cross Beam # 18 stiffeners.

Between Panel Point (PP) 118 to PP 119 (-1500), Segment 13AE offset measurement performed between Deck Panel (FL3) stiffeners to Deck Panel stiffeners of cross beam # 18 total 7 stiffeners.

Between Panel Point (PP) 119 (-1500) to 118, Segment 13AE offset measurement performed between Deck Panel (FL3) stiffeners to Deck Panel stiffeners of cross beam # 18 total 3 stiffeners.

At Bottom Panel extension at Segment 13AE to Cross Beam # 18 stiffeners.

Between Panel Point (PP) 118 to PP 119 (-1500), Segment 13AE offset measurement performed between Bottom Plate stiffeners to Bottom Panel stiffeners of cross beam # 18 total 7 stiffeners.

Between Panel Point (PP) 119 (-1500) to 118, Segment 13AE offset measurement performed between Bottom Plate stiffeners to Bottom Panel stiffeners of cross beam # 18 total 3 stiffeners.

The measurements were recorded in the Dimension Control Plan (DCP) on a separate form and submitted to the Lead Inspector and Engineer for review and disposition.

Segment 13AE (Floor Beam to Flange)

This QA Inspector observed the in-process welding by Shielded Metal Arc Welding (SMAW) process on a Complete Joint Penetration (CJP) weld. The weld joint was designated as FB3125-001-178. The welder identification was 054467 and observed welding in the 2G (Horizontal) position using approved Welding Procedure Specification WPS-B-P-2212-Tc-U4b-FCM-1. The piece mark was identified as weld connecting the Floor Beam FL3 to the Bottom Plate Flange at PP 119(-1500).

Please reference the pictures attached for more comprehensive details.

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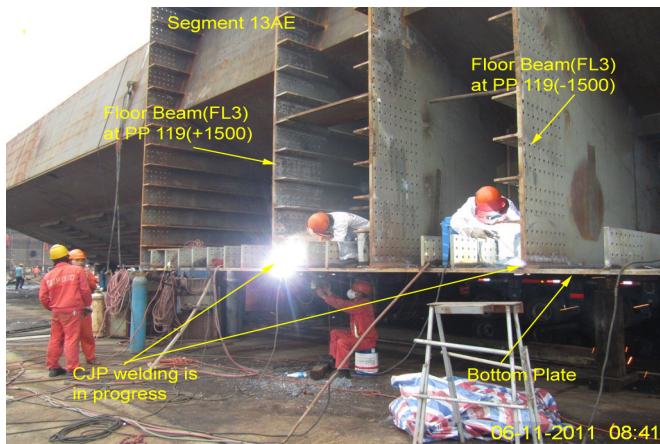
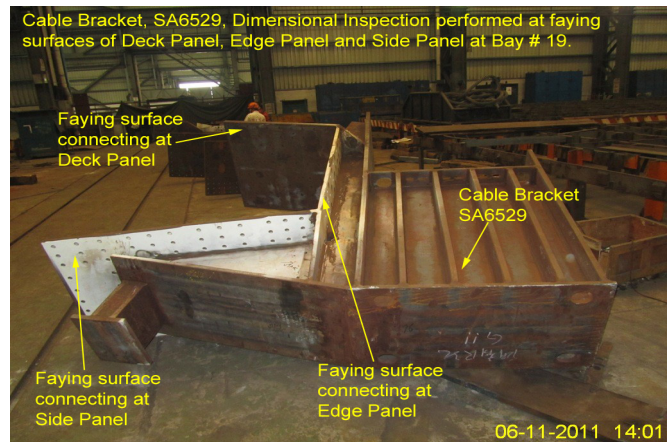
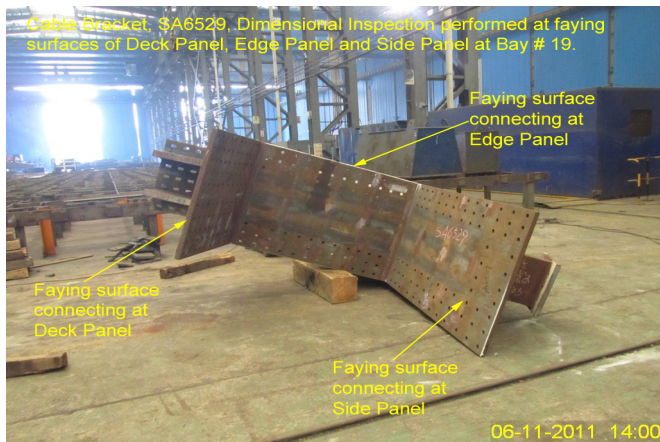
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## Segment 13AE (Floor Beam to Flange)

This QA Inspector observed the in-process welding by Shielded Metal Arc Welding (SMAW) process on a Complete Joint Penetration (CJP) weld. The weld joint was designated as FB3122-001-188. The welder identification was 215248 and observed welding in the 2G (Horizontal) position using approved Welding Procedure Specification WPS-B-P-2212-Tc-U4b-FCM-1. The piece mark was identified as weld connecting the Floor Beam FL3 to the Bottom Plate Flange at PP 119(+1500).

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.



### Summary of Conversations:

No relevant conversations were reported on this date.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 15000422372, who represents the Office of Structural Materials for your project.

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**Inspected By:** Math,Manjunath

Quality Assurance Inspector

**Reviewed By:** Miller,Mark

QA Reviewer